We Claim:

1. An expression vector comprising nucleic acid encoding at least one K+ channel gene operably linked to a promoter for expression in a host cell.

2. A vector according to claim 1, wherein the K+ channel gene is selected from the group consisting of Kv1.5 and Kv2.1/9.3, $K_v1.2$, $K_v3.1$, large conductance calcium-sensitive K+ channel genes and BK_{Ca}.

3. A vector according to claim 1, wherein the vector further comprises a reporter gene operably linked to the nucleic acid.

4. A vector according to claim 1, wherein the vector is replication-deficient.

5. A vector according to claim 1, wherein the promoter is a tissue specific promoter.

6. An isolated host cell stably transformed with the expression vector of claim 1.

7. A composition comprising an expression vector comprising nucleic acid encoding at least one K+ channel gene operably linked to a promoter, and a pharmaceutically acceptable excipient.

8. A host cell transformed with nucleic acid encoding at least on K+ channel gene.

9. A method of treating a vascular disease comprising administering to a person having a vascular disease a composition comprising an expression vector encoding at least one K+ channel gene operably linked to a promoter and a pharmaceutically acceptable excipient.

10. A method according to claim 8, wherein the vascular disease is selected from one of pulmonary hypertension and patent ductus arteriosus.

11. A method according to claim 9, wherein the administration is by nebulization.

12. A method according to claim 9, wherein the administration is intravascular.